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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/719,745	EDWARDS ET AL.	
	Examiner	Art Unit	
	Myles D. Robinson	2625	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *41* is/are allowed.

6)☒ Claim(s) *1 - 40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The attempt to incorporate subject matter into this application by reference to Attorney Docket Number 81174-306117 is ineffective because such incorporation by reference must clearly identify the referenced patent, application or publication. See MPEP 608.01(p) and 37 CFR 1.57(b)(2).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. ***Claims 30 – 40*** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 30 and 36 recite the limitation "the final media selection parameters" in last line of each respective claim. There is insufficient antecedent basis for this limitation in the claim. All claims dependent upon these claims suffer the same deficiency and, therefore, are rejected as well.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. ***Claims 1 – 5 and 23 – 26*** are rejected under 35 U.S.C. 102(b) as being anticipated by **Moreno *et al.*** (U.S. Patent No. 5,081,595).

Referring to **claim 1**, Moreno discloses a method of configuring a multi-media printer (*see Fig. 2, printer 8 comprising paper supply 107 and see Fig. 3, trays 110, 112, 114 [column 4, lines 15 – 23 and 30 – 35]*), comprising:

receiving a print operation from a print client device (*column 6, lines 54 – 59 wherein jobs remotely developed and then submitted to the system for printing is analogous to receiving a print operation from a remote client*), and

utilizing default media selection parameters for the print operation if an overriding default media selection parameter is activated (*see Figs. 7, 10 and 14 [column 7, line 44 – column 8, line 7]*), wherein the overriding default media selection parameter is programmable (*see Figs. 1, 2 and 5B, UI 52 [column 5, lines 1 – 22] and see Figs. 7 and 10 [column 7, lines 1 – 21]*).

Referring to **claim 2**, Moreno discloses the method further wherein the overriding default media selection parameter is programmable via the print client device (*column 6, lines 54 – 59 wherein jobs remotely developed and then submitted to the system for printing is analogous to receiving a print operation from a remote client and column 6, lines 59 – 65 wherein in order to print the job programmed, the system must know what the job program requirements [i.e. media type selected] to correlate the job program requirements with the print media in the trays to assure that the correct print media is*

load for printing, such that the job requirements [i.e. media type selected] must be submitted remotely for the system to work correctly).

Referring to **claim 3**, Moreno discloses the method further wherein the overriding default media selection parameter is programmable via an operation panel of the multi-media printer (*see Figs. 1, 2 and 5B, UI 52 [column 5, lines 1 – 22]*).

Referring to **claim 4**, Moreno discloses the method further wherein the overriding default media selection parameter is programmable via a presence of a configuration memory by the multi-media printer (*see Fig. 2, main memory 56 [column 5, lines 23 – 38]*).

Referring to **claim 5**, Moreno discloses the method further wherein the default media selection parameters are a single default set of settings applied to all print operations (*see Fig. 14 wherein a singular priority of use for default printing is set and applied [column 7, line 44 – column 8, line 7]*).

Referring to **claims 23 – 26**, the rationale provided in rejection of claims 1 – 4, respectively, are incorporated herein. The methods of claims 1 – 4 are stored as programs of instructions of claims 23 – 26, respectively, within memory and executed by a series of processors (*see Fig. 2, system controller 54, main memory 56 [column 4, lines 58 – 62 and column 5, lines 23 – 26]*).

6. ***Claims 10, 11, 17 and 27 – 29*** are rejected under 35 U.S.C. 102(b) as being anticipated by **Lubaway *et al.*** (U.S. Patent No. 6,353,479).

Referring to **claim 10**, Lubaway discloses a method of configuring a multi-media printer (*see Fig. 1 wherein printer 20 accepts different media types 24 [column 3, lines 40 – 47 and column 4, lines 29 – 37]*), comprising:

receiving a print operation from a print client device (*see Fig. 1, CPU 22 [column 3, lines 44 – 47]*),

determining if media selection parameters in the print operation are operational (*see Fig. 2 wherein look-up table 50 matches the identifier (binary) codes of various media types 40 [Fig. 1] with their appropriate print mode N1, T1, T4 [i.e. media selection parameters] [column 5, lines 35 – 57] and see Fig. 4 wherein media type selection 44 consults tabulation of clusters centers and determines the nearest cluster 62 – 64 [Fig. 3] in steps 100 – 104 [column 6, lines 14 – 23 and column 7, lines 4 – 11] such that clusters 62 – 64 help to determine the operability of the selected unknown paper types X1, X2 and those which are known such as print modes T1, N2, P2, etc. when a perfect match cannot be made*), and

utilizing a default media selection parameter of potential media selection parameters for the print operation if one of the media selection parameters is not operational (*see Fig. 3 wherein clusters 62 – 66 are utilized to verify if unknown paper types X1, X2 are within their boundaries and, especially in the case wherein the Gray code is applied to unknown paper type X1 to determine the appropriate operational print mode [column 6, lines 14 – 34] and see Fig. 3 wherein clusters 62 – 66 are utilized to verify if unknown paper types X1, X2 are within their boundaries and, especially in the case wherein a simple algebraic distance algorithm is applied to unknown paper type*

X2 to determine the closest-matching print mode [column 6, lines 34 – 58]), wherein the default media selection parameter is programmable (*see Figs. 1 – 3 wherein memory 32 is programmed with table 50, 60 comprising identifier codes for various print media types along with their corresponding print modes [column 5, lines 41 – 57 and column 6, lines 14 – 23]*).

Referring to **claim 11**, Lubaway discloses the method further including combining an operational media selection parameter with the default media selection parameter and determining if the combining of the operational media selection parameter with the default media selection parameter is supported (*see Fig. 3 wherein clusters 62 – 66 are utilized to verify if unknown paper types X1, X2 are within their boundaries and, especially in the case wherein the Gray code is applied to unknown paper type X1 to determine the appropriate operational print mode [column 6, lines 14 – 34]*).

Referring to **claim 17**, the rationale provided in the rejection of claim 10 is incorporated herein. In addition, the method of claim 10 includes the limitations and elements of the method of claim 17. Furthermore, a set of media selection parameters and a set of default media selection parameters can be shown in Figs. 2 – 3.

Referring to **claims 27 and 28**, the rationale provided in rejections of claims 10 and 11, respectively, are incorporated herein. The methods of claims 10 and 11 are stored as programs of instructions of claims 27 and 28, respectively, within memory and executed by a series of processors (*see Fig. 1, printer CPU 30, memory 32 [column 4, lines 2 – 7]*).

Referring to **claim 29**, the rationale provided in the rejection of claim 17 is incorporated herein. The method of claim 17 is stored as a program of instructions of claim 29 within memory and executed by a series of processors (*see Fig. 1, printer CPU 30, memory 32 [column 4, lines 2 – 7]*). Furthermore, a set of media selection parameters and a set of default media selection parameters can be shown in Figs. 2 – 3.

7. ***Claims 30, 31 and 35*** are rejected under 35 U.S.C. 102(b) as being anticipated by **Minowa *et al.*** (U.S. Patent No. 6,104,496).

Referring to **claim 30**, Minowa discloses a multi-media printer (*see Figs. 1 and 3 wherein printer 80 accepts slip forms, cut sheet paper 170 and roll paper 171 [Abstract and column 3, line 65 – column 4, line 2] and wherein CPU 60 controlling the entire printer 80 using programs stored within ROM 61 is analogous to printer 80 comprising program modules [column 5, lines 13 – 21]*), comprising:

a decoding module (*see Fig. 3, data analyzer 151*) to receive print job parameters and print job data for a print job (*see Fig. 4 wherein print data and its corresponding setting command [i.e. print job parameters] are received and interpreted by data analyzer 151 in step 301 [column 6, lines 60 – 66]*), to decode the print job parameters and the print job data to create decoded print job parameters including decoded print job media selection parameters and decoded print job data (*see Fig. 4 wherein data analyzer 151 interprets the setting command [i.e. print job parameters] as the recording paper insertion wait time and setting time set command [i.e. decoded print*

job media selection parameters] in step 302 before storing in memory in step 303 [column 6, lines 60 – 66 and column 7, lines 5 – 34] and see Fig. 5 wherein data analyzer 151 analyzes the setting command accompanied along with a print request in step 204, which is comprised within step 305 [column 8, lines 31 – 36]), and to output the decoded print job parameters including the decoded print job media selection parameters and the decoded print job data (*see Fig. 4 wherein decode wherein decoded print data is printed in step 306 [column 8, lines 16 – 20] and see Fig. 6 wherein the wait times for the selected recording medium type are set from among the insertion wait times and setting wait times [i.e. decoded printer job media selection parameters] stored for every recording medium types stored in memory 150 [column 9, lines 17 – 25] and see Fig. 6 wherein recording paper detection section 153 receives those wait times for the selected recording medium type are set from among the insertion wait times and setting wait times [i.e. decoded printer job media selection parameters] from data analyzer 151 in order to set timers 152, 154 in steps 311 – 312 [column 5, line 50 – column 6, line 22 and column 9, lines 17 – 25]*),

a configuration memory to store default configuration parameters (*see Fig. 3 wherein data storage section 150 stores a preset default value to be used if the insertion wait time or setting wait time for the user-selected recording paper type has not been set by [a user] command [column 6, lines 35 – 37 and column 7, lines 39 – 41]and see column 6, lines 55 – 59 wherein the default setting for the selection of roll paper 171 is automatic [e.g. immediate execution]*), and

a parameter determination module (*see Fig. 3, data analyzer 151*) to receive the decoded print job parameters including the decoded print job media selection parameters and the decoded print job data, to receive the default configuration parameters including default media selection parameters from the configuration memory, and to determine, utilizing the decoded print job media selection parameters and the default media selection parameters, the final print job media selection parameters for the print job (*column 5, line 50 – column 4, line 22, column 9, lines 17 – 25 and column 10, liens 14 – 32 wherein data analyzer 151 determines the wait times which will be used [i.e. final print job media selection parameters], which are either based upon a user's setting command [i.e. decoded print job media selection] or upon preset default values saved within storage 150 [e.g. no user setting command entered or if roll paper 171 is the selected print medium, which are analogous to default media selection parameters]*).

Referring to **claim 31**, Minowa discloses the printer further wherein an always use default setting is established and the parameter determination module selects the default media selection parameters as the final media selection parameters (*column 6, lines 55 – 59 wherein the default setting for the selection of roll paper 171 is automatic [e.g. immediate execution]*).

Referring to **claim 35**, Minowa discloses the printer further wherein the configuration memory is a non-volatile memory (*see Fig. 2, ROM 61*).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. ***Claims 6 – 9*** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Moreno *et al.*** (U.S. Patent No. 5,081,595) in view of **Simpson *et al.*** (U.S. Pre-Grant Publication No. 2003/0011801).

Referring to **claim 6**, Moreno discloses the method as discussed above in the rejection of claim 1 but does not explicitly disclose the method further wherein the default media selection parameters include a set of grayscale default settings and a set of color default settings.

Simpson discloses the method wherein the default media selection parameters (*see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives*) include a set of grayscale default settings and a set of color default settings (*paragraph 0043 wherein monochrome is analogous to a grayscale setting*).

Moreno and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon specific, user-defined

print job requirements. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*).

Referring to **claim 7**, Moreno discloses the method as discussed above in the rejection of claim 1 but does not explicitly disclose the method further wherein the default media selection parameters include default settings based on a number of images printed on a single sheet as specified in the print operation.

Simpson discloses the method wherein the default media selection parameters (*see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives*) include default settings based on a number of images printed on a single sheet as specified in the print operation (*see Fig. 3 wherein, for example, selector 248 changes the copy count to 2 whenever the document name ends with "JPG and the length set is one page because at least 50% of the time, according to the user print history 252, the*

user requests two copies of a document one page in length and ending in "JPG" [paragraph 0047]).

Moreno and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon specific, user-defined print job requirements. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*).

Referring to **claim 8**, Moreno discloses the method as discussed above in the rejection of claim 1 but does not explicitly disclose the method further wherein the default media selection parameters include default settings selected based on a size of a source image as specified in the print operation.

Simpson discloses the method wherein the default media selection parameters (*see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives*)

include default settings selected based on a size of a source image as specified in the print operation (*paragraph 0021 wherein each print option [e.g. automatic conversion of document to the size of paper in the printer] used to configure a printer affects how the printer will print documents it receives and see paragraphs 0042 and 0047 wherein a particular rule may map any print request for an image greater than a particular size to certain print option configuration*).

Moreno and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon specific, user-defined print job requirements. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*).

Referring to **claim 9**, Moreno discloses the method as discussed above in the rejection of claim 1 but does not explicitly disclose the method further wherein the default media selection parameters include default settings selected based on a modality of the print operation.

Simpson discloses the method wherein the default media selection parameters (*see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual*

settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives) include default settings selected based on a modality of the print operation (*see paragraph 0021 wherein print options include a print quality of the document [e.g. photo, draft, text, etc.], whether or not to watermark the printed image, simplex/duplex printing, collation of the document, automatic conversion of document to the size of paper [e.g. auto print-to-fit media mode] and various other finishing operations [e.g. stapling, binding, cutting], which all are different printer modes [modalities] in which the printer executes a print request*).

Moreno and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon specific, user-defined print job requirements. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*).

10. ***Claims 12 and 18*** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lubaway *et al.*** (U.S. Patent No. 6,353,479) in view of **Moreno *et al.*** (U.S. Patent No. 5,081,595).

Referring to **claim 12**, Lubaway discloses the method as discussed above in the rejection of claim 10 but does not explicitly disclose the method further wherein the potential default media selection parameters are a single set of settings applied to all print operations.

Moreno discloses the method wherein the default media selection parameters are a single default set of settings applied to all print operations (*see Fig. 14 wherein a singular priority of use for default printing is set and applied [column 7, line 44 – column 8, line 7]*).

Lubaway and Moreno are combinable because they are from the same field of endeavor, being print option configuration of a printer that facilitates the determination of proper print modes and minimization of printing times. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include applying a single set of settings to all print operations. The suggestion/motivation for doing so would have been to minimize the wait time between print jobs when the system detects that there are other suitable print media available in other printer trays, as suggested by Moreno (*Abstract, column 1, lines 5 – 36 and 47 – 58*).

Referring to **claim 18**, the rationale provided in the rejection of claim 12 is incorporated herein. In addition, the method of claim 12 includes the limitations and

elements of the method of claim 18. Furthermore, a set of media selection parameters and a set of default media selection parameters can be shown in Figs. 2 – 3.

11. ***Claims 13 – 16 and 19 – 22*** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lubaway *et al.*** (U.S. Patent No. 6,353,479) in view of **Simpson *et al.*** (U.S. Pre-Grant Publication No. 2003/0011801).

Referring to **claim 13**, Lubaway discloses the method as discussed above in the rejection of claim 10 but does not explicitly disclose the method further wherein the default media selection parameters include a set of grayscale default settings and a set of color default settings.

Simpson discloses the method wherein the default media selection parameters (*see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives*) include a set of grayscale default settings and a set of color default settings (*paragraph 0043 wherein monochrome is analogous to a grayscale setting*).

Lubaway and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon detected print media specifications. At the time of the invention, it would have been obvious to one of

ordinary skill in the art to include determining which print options are operational with the detected print media and then allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, such as for a particular print media source in the tray of the printer, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*).

Referring to **claim 14**, Lubaway discloses the method as discussed above in the rejection of claim 10 but does not explicitly disclose the method further wherein the default media selection parameters include default settings based on a number of images printed on a single sheet as specified in the print operation.

Simpson discloses the method wherein the default media selection parameters (*see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives*) include default settings based on a number of images printed on a single sheet as specified in the print operation (*see Fig. 3 wherein, for example, selector 248 changes the copy count to 2 whenever the document name ends with "JPG and the length set is one page because at least 50% of the time, according to the user print history 252, the*

user requests two copies of a document one page in length and ending in "JPG" [paragraph 0047]).

Lubaway and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon detected print media specifications. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include determining which print options are operational with the detected print media and then allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, such as for a particular print media source in the tray of the printer, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*).

Referring to **claim 15**, Lubaway discloses the method as discussed above in the rejection of claim 10 but does not explicitly disclose the method further wherein the default media selection parameters include default settings selected based on a size of a source image as specified in the print operation.

Simpson discloses the method wherein the default media selection parameters (*see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection]*

used to configure a printer affects how the printer will print documents it receives) include default settings selected based on a size of a source image as specified in the print operation (*paragraph 0021 wherein each print option [e.g. automatic conversion of document to the size of paper in the printer] used to configure a printer affects how the printer will print documents it receives and see paragraphs 0042 and 0047 wherein a particular rule may map any print request for an image greater than a particular size to certain print option configuration*).

Lubaway and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon detected print media specifications. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include determining which print options are operational with the detected print media and then allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more characteristics of the print request, such as for a particular print media source in the tray of the printer, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*).

Referring to **claim 16**, Lubaway discloses the method as discussed above in the rejection of claim 10 but does not explicitly disclose the method further wherein the default media selection parameters include default settings selected based on a modality of the print operation.

Simpson discloses the method wherein the default media selection parameters (*see Fig. 3 wherein print option selector 248 is comprised within printer 224 and begins with a default set of print options for a print request and then overrides individual settings in the default set based upon history 252 and rules 250 [paragraphs 0041, 0042 and 0045 – 0047] and see paragraph 0021 wherein each print option [e.g. a particular print media source from a loaded input tray, which is analogous to a media selection] used to configure a printer affects how the printer will print documents it receives*) include default settings selected based on a modality of the print operation (*see paragraph 0021 wherein print options include a print quality of the document [e.g. photo, draft, text, etc.], whether or not to watermark the printed image, simplex/duplex printing, collation of the document, automatic conversion of document to the size of paper [e.g. auto print-to-fit media mode] and various other finishing operations [e.g. stapling, binding, cutting], which all are different printer modes [modalities] in which the printer executes a print request*).

Lubaway and Simpson are combinable because they are from the same field of endeavor, being print option configuration of a printer based upon detected print media specifications. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include determining which print options are operational with the detected print media and then allowing certain default parameters to be overridden. The suggestion/motivation for doing so would have been to improve the user's ability to configure printers in a user-friendly manner such that one or more print options to be used in a print request are automatically selected based at least in part on one or more

characteristics of the print request, such as for a particular print media source in the tray of the printer, as suggested by Simpson (*paragraphs 0004, 0007, 0021 and 0060*).

Referring to **claims 19 – 22**, the rationale provided in the rejections of claims 13 – 16, respectively, are incorporated herein. In addition, the methods of claims 13 – 16 include the limitations and elements of the methods of claims 19 – 22, respectively. Furthermore, a set of media selection parameters and a set of default media selection parameters can be shown in Figs. 2 – 3.

12. ***Claims 32 – 34*** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Minowa *et al.*** (U.S. Patent No. 6,104,496) in view of **Lubaway *et al.*** (U.S. Patent No. 6,353,479).

Referring to **claim 34**, Minowa discloses the printer as discussed above in the rejection of claim 30 but does not explicitly disclose the printer further wherein the parameter determination module identifies that the decoded print job media selection parameters are partially operational, utilizes the default configuration media selection parameters to supplement the decoded print job media selection parameters, verifies that a combination of the default configuration media selection parameters and the decoded print job media selection parameters are operational, and if the combination of the default configuration media selection parameters and the decoded print job media selection parameters are not operational, utilizes the default configuration media selection parameters as the final media selection parameters.

Lubaway discloses the printer wherein the parameter determination module (*see Fig. 1, media type selection 44*) identifies that the decoded print job media selection parameters (*see Fig. 2 wherein look-up table 50 matches the identifier (binary) codes of various media types 40 [Fig. 1] with their appropriate print mode N1, T1, T4 [i.e. decoded print job media selection] [column 5, lines 35 – 57]*) are partially operational (*see Fig. 6 wherein the print mode [ex. T1, N2, P2, etc.] that would properly correspond with unknown, selected paper types X1, X2 are analogous to partially-operational decoded print job media selection parameters [column 6, lines 35 – 58] and see Fig. 4 wherein media type selection 44 cannot match the code stored in table 50, 60 with the code retrieved from code reader 42 [Fig. 1] in step 96, then media type selection module 44 [column 7, lines 4 – 11]*), utilizes the default configuration media selection parameters to supplement the decoded print job media selection parameters (*see Fig. 6 wherein the stored print modes associated with predefined identifier codes [column 5, lines 53 – 57] are analogous to default configuration media selection parameters and see Fig. 4 wherein media type selection 44 consults tabulation of clusters centers and determines the nearest cluster 62 – 64 [Fig. 3] in steps 100 – 104 [column 6, lines 14 – 23 and column 7, lines 4 – 11] such that clusters 62 – 64 help supplement the deficiency between the selected unknown paper types X1, X2 and those which are known such as print modes T1, N2, P2, etc.*), verifies that a combination of the default configuration media selection parameters and the decoded print job media selection parameters are operational (*see Fig. 3 wherein clusters 62 – 66 are utilized to verify if unknown paper types X1, X2 are within their boundaries and, especially in the case*

wherein the Gray code is applied to unknown paper type X1 to determine the appropriate operational print mode [column 6, lines 14 – 34]), and if the combination of the default configuration media selection parameters and the decoded print job media selection parameters are not operational, utilizes the default configuration media selection parameters as the final media selection parameters (*see Fig. 3 wherein clusters 62 – 66 are utilized to verify if unknown paper types X1, X2 are within their boundaries and, especially in the case wherein a simple algebraic distance algorithm is applied to unknown paper type X2 to determine the closest-matching print mode [column 6, lines 34 – 58]*).

Minowa and Lubaway are combinable because they are from the same field of endeavor, being techniques of detecting different types of print media and determining the proper print modes for those detected types of print media. At the time of the invention, it would have been obvious to one of ordinary skill in the art to include supplementing known print mode for an unidentifiable print media type. The suggestion/motivation for doing so would have been to facilitate the rapid determination of the print mode best suited for the media entering the printer, as suggested by Lubaway (*column 1, lines 5 – 8, 54 – 62, column 2, lines 16 – 24 and column 3, lines 4 – 19*).

Referring to **claims 32 and 33**, the rationale provided in the rejection of claim 34 is incorporated herein. In addition, the printer of claim 34 encompasses the limitations and elements recited the printers of claims 32 and 33.

13. ***Claims 36 – 40*** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Minowa *et al.*** (U.S. Patent No. 6,104,496) in view of **Ozaki** (U.S. Patent No. 6,912,061).

Referring to **claim 36**, Minowa discloses the multi-media printer as discussed above in the rejection of claim 30 but does not explicitly disclose the multi-media printer included within a medical imaging system, comprising a plurality of computing devices to transmit print jobs including print job parameters and print job data, a plurality of medical imaging devices to transmit print jobs including print job parameters and print job data, and a multi-media printer to receive the print jobs from either the plurality of computing devices or the plurality of medical imaging devices and to create an image from the print job data according to the print job parameters.

Ozaki discloses the multi-media printer (*see Fig. 1, printers 201, 202 [column 5, line 61 – column 6, line 15*) included within a medical imaging system (*see Fig. 1, network system 100 [Abstract and column 5, lines 27– 42]*), wherein the system comprising:

a plurality of computing devices (*see Fig. 1, workstations 10A, 10B*) to transmit print jobs including print job parameters and print job data (*column 6, lines 41 – 50 wherein it is well-known in the art that workstations 10A, 10B submit print jobs via a network [e.g. LAN, WAN] to printers 201, 202*),

a plurality of medical imaging devices (*see Fig. 1, medical modalities 50A – 50F*) to transmit print jobs including print job parameters and print job data (*column 5, lines 49 – 54*), and

the multi-media printer to receive the print jobs from either the plurality of computing devices or the plurality of medical imaging devices and to create an image from the print job data according to the print job parameters (*column 5, line 61 – column 6, line 40*).

Minowa and Ozaki are combinable because they are from the same field of endeavor, being multi-media printers. At the time of the invention, it would have been obvious to one of ordinary skill in the art to connect several different medical imaging devices to a multi-media printer. The suggestion/motivation for doing so would have been to print acquired images from medical imaging devices at various sizes, as suggested by Ozaki (*column 1, lines 17 – 25 and column 6, lines 1 – 15*).

Referring to **claims 37 – 40**, the rational provided above in claims 31 – 33 and 35, respectively, are incorporated herein. In addition, the printer of claims 31 – 33 and 35 include the limitations and elements of the system of claims 37 – 40, respectively.

Allowable Subject Matter

14. ***Claim 41*** is allowed.

Referring to **claim 41**, the innovative limitation that distinguishes the Applicant's claim is a multi-media printer that utilizes two printing technologies.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

D'Alessandro *et al.* (U.S. Patent No. 6,600,570) disclose a multi-media printer wherein each type of media has its printed sheets directed to a specific output bin (*see Abstract*).

Owa *et al.* (U.S. Patent No. 6,348,971) disclose printing a document based on user information indicating conditions as print command and specifications wherein based upon printer information concerning print environments of the printer causes a document to print (*see Abstract and Figs. 3 – 6*).

Bredesen *et al.* (U.S. Patent No. 3,839,708) disclose an input-output terminal for hospital information system wherein the terminal is adaptable in its configuration and output format in order to operate in diverse environments and provides input and output formats suitable for each area of use (*see Abstract*).

Aonuma *et al.* (U.S. Patent No. 6,906,814) disclose a plurality of network printers, which are provided different kinds of film for image reproduction, wherein available kinds of film with respect to each of the printers are recognized such that the printer possessing a certain kind of film coinciding with an output request is selected in accordance with the results of recognition (*see Abstract*).

Hower Jr., *et al.* (U.S. Patent No. 5,467,434) disclose a method for determining printer option availability and representing conflict resolution in a combination of print job selections (*see Abstract and Figs. 2, 4 and 11 – 12B*).

DeHority (U.S. Patent No. 5,129,639) discloses a printer configuration control system which compares the print job requirements to the printer capability and determines the best match there between such that when a mismatch does occur, the

system determines the best match between size, color, weight and type by determining a mismatch magnitude between the job paper requirements and the printer's paper capabilities or stocks (*see Abstract and Figs. 1, 2A and 2B*).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myles D. Robinson whose telephone number is (571)272-5944. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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